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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,954	08/31/2005	Ahmed Kefti-Cherif	271539US2XPCT	8036
22850	7590	11/19/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.			LE, DAVID D	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/533,954	Applicant(s) KEFTI-CHERIF ET AL.	
	Examiner David D. Le	Art Unit 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-41 and 43-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 41, 43-47 and 50 is/are allowed.
- 6) ☒ Claim(s) 31-40, 48, 49, 51, 53, 58 and 59 is/are rejected.
- 7) ☒ Claim(s) 52, 54-57 and 60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the fourth Office action on the merits of Application No. 10/533,954, filed 31 August 2005. Claims 31-41 and 43-60 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:

- Three Foreign Priority Documents, received on 05/04/05
- Information Disclosure Statement, received on 05/04/05
- Declaration and Power of Attorney, received on 08/31/05
- Drawings, received on 10/24/07

Drawings

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 31-40, 48, 49, 53, 58 and 59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 31:

- Lines 9-10 recite the limitation "each electric machine". There is insufficient antecedent basis for this limitation in the claim.
- Line 12 recites the limitation "the electric machines". There is insufficient antecedent basis for this limitation in the claim.

Claim 38:

- Line 3 recites the limitation "the first brake". There is insufficient antecedent basis for this limitation in the claim.

Claim 48:

- Line 12 recites the limitation "an engine shaft of the internal combustion engine". It is unclear whether this newly recited limitation "an engine shaft of the internal combustion engine" is different from "a shaft of the internal combustion engine", which is first recited on lines 15-16 of claim 41.

Claim 53:

- Lines 2-3 recite the limitation "the simple epicyclic gearset". There is insufficient antecedent basis for this limitation in the claim.

Claim 58:

- Lines 2-3 recite the limitation "the simple epicyclic gearset". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 31, 32 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,935,035 to Schmidt, first interpretation (hereinafter referred to as Schmidt's first interpretation).

Claims 31, 32 and 40:

Schmidt's first interpretation (Figs. 1 and 2; column 1, line 54 – column 4, line 36) discloses an electro-mechanical powertrain comprising:

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- A primary power train (i.e., Fig. 1, being the combination of elements 22 and 24) including a first epicyclic gearset (i.e., Fig. 1, element 22) and a second epicyclic gearset (i.e., Fig. 1, element 24);
- A secondary power train (i.e., Fig. 1, being the gear arrangement in the vicinity of elements 26 and 28) having a third epicyclic gearset (i.e., Fig. 1, element 26);
- A first electric machine (i.e., Fig. 1, element 14);
- A second electric machine (i.e., Fig. 1, element 16);
- A mode-changing system (i.e., Fig. 1, element 62 or 72);
- An internal combustion engine (i.e., Fig. 1, element 12) is connected via a reducing stage (i.e., Fig. 1, element 76) to a ring gear (i.e., Fig. 1, element 32) of the first epicyclic gearset (22) and to a planet carrier (i.e., Fig. 1, element 48) of the second epicyclic gearset (24) of a gearbox (i.e., Fig. 1, element 20);
- Wherein the wheels are connected to the gearbox via a reduction stage (i.e., Fig. 1, element 28) having a first gear ratio, one access of which is coupled respectively to a planet carrier (i.e., Fig. 1, element 34) of the first epicyclic gearset (22) and to a ring gear (i.e., Fig. 1, element 44) of the second epicyclic gearset (24);
- An operating controller (i.e., Fig. 1, element ECU) including a motive power unit controller, an engine controller, an electric machine operating controller and a transmission-mode-changing controller (i.e., column 1, line 56 – column 4, line 36).

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8. Claim 51 is rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,935,035 to Schmidt, second interpretation (hereinafter referred to as Schmidt's second interpretation).

Claim 51:

Schmidt's second interpretation (Figs. 1 and 2; column 1, line 54 – column 4, line 36) discloses an electro-mechanical powertrain comprising:

- A first compound gearset (i.e., Fig. 1, being the combination of elements 22 and 24) configured to connect an internal combustion engine (i.e., Fig. 1, element 12) to vehicle wheels along a first power-splitting train;
- A second compound gearset (i.e., Fig. 1, element 26) configured to achieve power splitting via a second power-splitting train;
- A simple gearset (i.e., Fig. 1, element 28) configured to recombine the first and second power-splitting trains;
- Wherein the first compound gearset, the second compound gearset, and the simple gearset achieve a system for changing modes between at least two modes of operation of the transmission (i.e., column 2, line 47 – column 3, line 29); and
- Wherein the internal combustion engine is connected to a first epicyclic gearset of the first compound gearset (i.e., Fig. 1).

Allowable Subject Matter

9. Claims 41, 43-47 and 50 are allowed.

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10. Claims 52, 54-57 and 60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 33-39, 48, 49, 53, 58 and 59 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments with respect to claims 31-41 and 43-60 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Anthoine et al. (U. S. Patent No. 7,220,199) teaches an infinitely variable power branching transmission, as shown in Fig. 1.
- Larkin (U. S. Patent No. 6,962,545) teaches a parallel-hybrid transmission, as shown in Fig. 1A.
- Schmidt et al. (U. S. Patent No. 6,090,005) teaches a two-mode, compound-split, hybrid transmission, as shown in Fig. 1.

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14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0900-1730).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Le/
Primary Examiner, Art Unit 3655
11/15/2008

ddl